

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A noise reduction device comprising:

a first antenna which receives a wireless signal;

a second antenna for noise scanning;

setting means for setting an optimum attenuation factor according to a distance between said first antenna and said second antenna;

attenuation means for attenuating a received signal from said second antenna at the optimum attenuation factor; and

subtraction means for subtracting an output signal of said attenuation means from the received signal from said first antenna, and for thereby reducing a noise of the received signal from said first antenna.

2. (currently amended) [[A]] The noise reduction device according to claim 1, comprising:

~~a first antenna which receives a wireless signal;~~

~~a second antenna for noise scanning;~~

wherein said setting means includes a table which stores data indicating a relationship between a distance between

said first antenna and said second antenna and an attenuation factor; and

means for setting the distance between said first antenna and said second antenna[[:]],

~~means for attenuating~~ wherein said attenuation means attenuates a received signal from said second antenna at the attenuation factor which is stored in said table and which corresponds to the set distance; ~~and~~

~~means for subtracting an output signal of said attenuation means from the received signal from said first antenna, and for thereby reducing a noise of the received signal from said first antenna.~~

3. (original) The noise reduction device according to claim 1, wherein said second antenna is disposed near a noise source.

4. (original) The noise reduction device according to claim 2, wherein said second antenna is disposed near a noise source.

5. (original) The noise reduction device according to claim 1, wherein

said optimum attenuation factor setting means measures an error occurrence rate of an output signal of said subtraction

means while changing the attenuation factor of said attenuation means, and sets an attenuation factor, at which the measured error occurrence rate is a lowest rate, as the optimum attenuation factor.

6. (original) The noise reduction device according to claim 5, wherein said second antenna is disposed near a noise source.

7. (original) The noise reduction device according to claim 6, further comprising:

means for regularly updating said optimum attenuation factor to a new optimum attenuation factor.

8. (currently amended) [[A]] The noise reduction device according to claim 1, comprising:

- ~~—— a first antenna which receives a wireless signal;~~
- ~~—— a second antenna for noise scanning;~~

wherein said setting means includes means for detecting a level difference between a peak of the received signal from said first antenna and a peak of a received signal from said second antenna; and

means for calculating an attenuation factor based on the detected level difference[[;]],

~~means for attenuating~~ wherein said attenuation means
attenuates the received signal from said second antenna at the
attenuation factor calculated by said calculation means; ~~and~~

~~means for subtracting an output signal of said~~
~~attenuation means from the received signal from said first~~
~~antenna, and for thereby reducing a noise of the received signal~~
~~from said first antenna.~~

9. (canceled)

10. (currently amended) [[A]] The noise reduction
device according to claim 1, further comprising:

~~a first antenna which receives a wireless signal;~~

means for generating a spurious-signal;

a third ~~second~~ antenna which is provided near said
second antenna and which transmits the spurious-signal;

~~a third antenna which is provided near said second~~
~~antenna and which receives the spurious-signal transmitted from~~
~~said second antenna; and~~

means for detecting a level difference between the
signal received at said first antenna and the signal received at
said second ~~third~~ antenna~~[[;]]~~,

~~means for setting~~ wherein said setting means sets an
optimum attenuation factor according to the detected level
difference;

~~means for attenuating the received signal from said third antenna at the optimum attenuation factor; and~~

~~means for subtracting an output signal of said attenuation means from the received signal from said first antenna, for thereby reducing a noise of the received signal from said first antenna.~~

11. (currently amended) [[A]] The noise reduction device according to claim 1, further comprising:

~~a first antenna which receives a wireless signal;~~

~~— a second antenna for noise scanning;~~

~~— means for setting an optimum attenuation factor according to a distance between said first antenna and said second antenna;~~

first peak detection means for detecting a peak of the received signal from said first antenna;

second peak detection means for detecting a peak of a received signal from said second antenna;

means for comparing the peak detected by said first peak detection means with the peak detected by said second peak detection means; and

means for extracting a noise component from the received signal having the higher peak based on a comparison result of said comparison means[[;]],

~~means for attenuating~~ wherein said attenuation means
attenuates the extracted noise component at the optimum
attenuation factor instead of the received signal from said
second antenna; and

~~means for subtracting an output signal of said~~
~~attenuation means from the received signal from said first~~
~~antenna, and for thereby reducing a noise of the received signal~~
~~from said first antenna.~~

12. (original) The noise reduction device according to
claim 11, wherein

said setting means measures an error occurrence rate of
an output signal of said subtraction means while changing the
attenuation factor of said attenuation means, and sets the
attenuation factor, at which the measured error occurrence rate
is a minimum rate, as the optimum attenuation factor.

13. (original) The noise reduction device according to
claim 11, wherein

said setting means detects a level difference between
the peak of the received signal from said first antenna and the
peak of the received signal from said second antenna, and
calculates the optimum attenuation factor based on the detected
level difference.

14. (original) The noise reduction device according to claim 1, further comprising:

means for measuring an error occurrence rate of the received signal from said first antenna;

means for comparing the measured error occurrence rate with a preset specified value; and

means for turning on and off a power of said second antenna based on a comparison result of said comparison means.

15. (original) The noise reduction device according to claim 2, further comprising:

means for measuring an error occurrence rate of the received signal from said first antenna;

means for comparing the measured error occurrence rate with a preset specified value; and

means for turning on and off a power of said second antenna based on a comparison result of said comparison means.

16. (original) The noise reduction device according to claim 8, further comprising:

means for measuring an error occurrence rate of the received signal from said first antenna;

means for comparing the measured error occurrence rate with a preset specified value; and

means for turning on and off a power of said second antenna based on a comparison result of said comparison means.

17. (canceled)

18. (original) The noise reduction device according to claim 10, further comprising:

means for measuring an error occurrence rate of the received signal from said first antenna;

means for comparing the measured error occurrence rate with a preset specified value; and

means for turning on and off a power of said second antenna based on a comparison result of said comparison means.

19. (original) The noise reduction device according to claim 11, further comprising:

means for measuring an error occurrence rate of the received signal from said first antenna;

means for comparing the measured error occurrence rate with a preset specified value; and

means for turning on and off a power of said second antenna based on a comparison result of said comparison means.

20. (original) A wireless LAN base station apparatus comprising the noise reduction device according to claim 1.

21. (original) A wireless LAN base station apparatus comprising the noise reduction device according to claim 2.

22. (original) A wireless LAN base station apparatus comprising the noise reduction device according to claim 8.

23. (canceled)

24. (original) A wireless LAN base station apparatus comprising the noise reduction device according to claim 10.

25. (original) A wireless LAN base station apparatus comprising the noise reduction device according to claim 11.